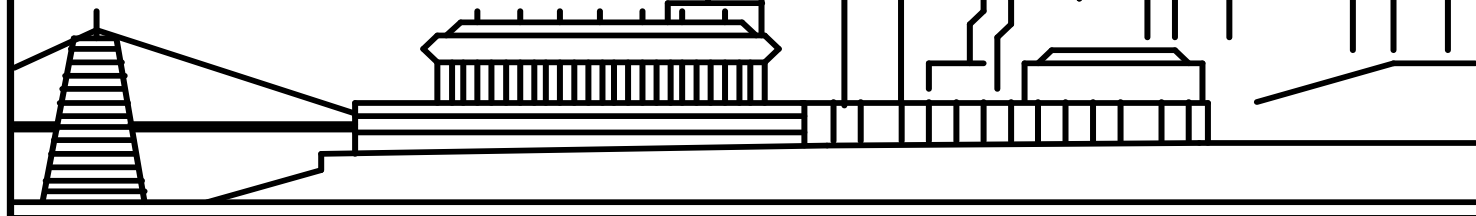




INSTITUTE OF
ELECTRICAL &
ELECTRONICS
ENGINEERS, INC.



JANUARY 2000

IEEE CINCINNATI SECTION NEWSLETTER

JANUARY MEETING

WINDOWS 2000

DATE : January 20, 2000

PLACE : Hartwell Recreation Center - See directions and map on Page 2.

TIME:	5:00 to 7:00 PM (Social Time & dinner)	COST: \$10.00 (Members)
	7:00 PM (Program)	\$ 5.00 (Students/Retired Members)
	8:30 PM (Approx. - Adjournment)	\$18.00 (Non-Members)

RESERVATIONS ARE REQUIRED FOR DINNER !!!

THE CINCINNATI SECTION NOW HAS ITS OWN VOICE MAILBOX for making reservations for meetings or for providing comments or suggestions to **YOUR** Executive Committee.

Please call the Cincinnati Section Voice Mailbox at 629-9380, by **Noon, Monday, January 17, 2000** if you plan to attend. Please leave your **Name, IEEE Member Number**, and **a daytime telephone number**. Members who called in a reservation in response to the pre-announcement in the last newsletter need not call again.

ABOUT THE MEETING/SPEAKERS: Don Sivitz, VP and CEO, and Larry Van Tuyl, VP Sales and Marketing from Full Service Networking will present the significant features and functions of Windows 2000 Professional, Windows 2000 Server and Windows 2000 Advanced Server.

Microsoft announced that the Windows 2000 Professional, Windows 2000 Server and Windows 2000 Advanced Server operating systems are on schedule to release to manufacturing (RTM) in calendar year 1999. Microsoft plans to have general retail, channel and OEM availability of Windows 2000 on Feb. 17, 2000.

Windows 2000 will enable the next generation of PC computing by providing customers with the easy way to Internet-enable their business using the integrated Web application services, increased scalability and industry-standard security. Windows 2000 will provide a more reliable platform designed for increased system uptime and a more manageable operating system to lower desktop management costs, and will offer more centralized management for servers. In addition, Windows 2000 will enable knowledge workers to take advantage of new devices.

The mission of the Windows® 2000 Professional development team was to create a mainstream desktop operating system that incorporates the best business features of Windows 98 and builds on the traditional strengths of Windows NT, which together reduces the costs associated with desktop management. Windows 2000 Professional is the result.

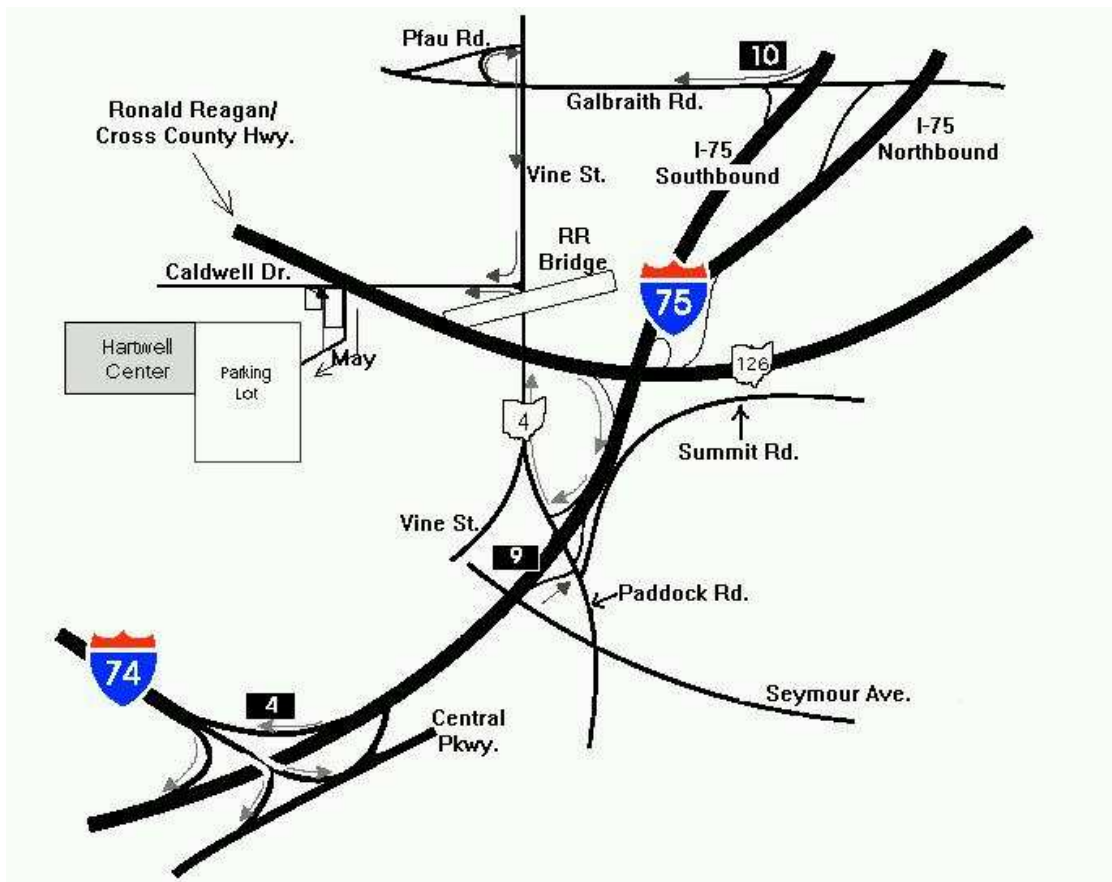
The Windows® 2000 Server operating systems are the next generation of the Windows NT® Server series of operating systems. In addition to providing a comprehensive Internet and applications platform, Windows 2000 Server builds on the strengths of Windows NT Server 4.0 by delivering increased reliability, availability, and scalability with end-to-end management features that reduce operating costs.

Full Service Networking specializes in the design, installation and support of computer networks utilizing Microsoft Windows NT, Office, and BackOffice, and develops custom applications with Visual Basic, Exchange, Access, and SQL Server. Full Service Networking is a Microsoft Solution Provider - Partner, Citrix Gold Reseller, and Compaq Authorized Service Provider. Their Web Page address is www.FullService.Net

Don Sivitz holds a number of certifications from Microsoft, 3Com, Intel, Citrix and many other hardware and software providers. Don is recognized for his knowledge of integrated voice and data networks. He is a founder of Full Service Networking.

Larry Van Tuyl has been working in the computer industry since 1962 working on the design and deployment of computers and networks to large, medium and small organizations. He has a BS in Science Engineering from the University of Michigan. Larry joined Full Service Networking in 1996.

MEETING LOCATION DIRECTIONS:



From the North: Via I-75 Southbound, take Exit 10, turn right onto Galbraith Rd. Go West, past Vine St, take turnout onto Pfau Rd. to Vine (Ohio Rt. 4). Right onto Vine Southbound. Right onto Caldwell just before the Railroad bridge. Turn left onto May into the parking lot.

From the West using I-74 and Cross County: I-74 to I-275 Northbound; I-275 Northbound to Cross County (Ohio Rt. 126); Ohio 126 to I-75 Southbound to Exit 9. Turn right at the end of the ramp; Under the second Railroad bridge, turn left onto Caldwell; Under expressway bridge, turn left onto May into the parking lot.

From the South: Via I-75 N, take Exit 9; Left onto Paddock / Vine / Ohio Rt. 4. Under the Railroad bridge to traffic signal (Caldwell); Left onto Caldwell, then left onto May into the parking lot.

CHAIR'S MESSAGE

by Ron Harbaugh, Section Chair

On behalf of the entire Cincinnati Section, I wish to thank Mr. Chris Connaughton for providing a very interesting program at our Section meeting in December. Mr. Connaughton is Director of Research and Development for Intelliseek, Inc., located in Sharonville.

Mr. Connaughton provided a lot of information about the internet and the use and applications of search engines. Also, we want to thank Rose Morrow of Intelliseek for helping set up the program.

Take a look at www.intelliseek.com. Software tools for free.

I have some good news, bad news. We have put the annual Golf Outing to rest. Increased expenses and decreasing participation is forcing us to cancel this tradition as an IEEE event. It was fun while it lasted and I made it to a few of the Golf Outings myself. I don't like doing this, however, it's time move on to something better.

We are working on establishing a family event. We believe we should put together an outing that the spouse (significant other?) and kids can enjoy as part of the IEEE family. There is nothing else to reveal right now other than we are trying to set something up with Kings Island. All of our planning is in the preliminary stage.

It seems difficult to discuss any year end events in my January, 2000 Chair's message when I have to write this early in December, 1999. I keep getting the temptation to put down Merry Christmas and Happy New Year, which will look strange in the middle of January. On the job here, we are doing final testing on our systems and checking them twice for Y2K problems and compliance. Everything tests O.K.. I don't expect any problems. I will be disappointed if there are any surprises. Good luck to all of you that have to suffer through this millennium bug epidemic.

UPCOMING SECTION MEETINGS AND TOPICS

January 18, 2000 - Executive Committee Meeting - James Tavern in Blue Ash

February 24, 2000 - Section Meeting (ESC Banquet)

March 23, 2000 - Section Meeting; Topic will be "Doppler Radar "

April, 2000 - Section Meeting; Topic will be "PACE "

May, 2000 - Section Meeting; Topic will be " Appliance Applications – LINUX ".

Detailed information about the Section Meetings will be included in that month's newsletter. If you are interested in attending an Executive Committee Meeting, please contact either Ron Harbaugh or Jack Beckmeyer (see last page for phone numbers).

RESULTS OF THE CINCINNATI SECTION SENIOR MEMBER INITIATIVE

By Jim Everly, Vice-Chairman

The results of the October 23, 1999, Cincinnati Section sponsored Senior Member Initiative Workshop are in. The Cincinnati Section is pleased to announce that eleven IEEE members took advantage of the workshop and were upgrade to Senior Member status in the Institute. Please join me in congratulating the following individuals on their elevation to Senior Member Grade.

Bryan M. Buchanan	Ralph D. Campbell
Ronald N. Ciminero	Ronald D. Harbaugh
Madelyn A. Harwood	H. Randolph Holt
Sanjiv M. Karani	Stephen M. Olenick
Richard E. Read	Elvin Stepp
Jerry T. Taylor	

IEEE Senior Member grade is the highest IEEE membership grade that can be obtained by application. Often-cited reasons for applying include recognition of accomplishments by peers, professional advancement, and personal satisfaction. Section members still interested in elevating their current member status to Senior Member grade should contact Jim Everly at j.everly@ieee.org.

NEW MEMBERS

The following individuals are IEEE members who are new to our Section:

KRISHNA K. ALLIKA	AJAY D. KSHEMKALYANI
ELIZABETH A. BEECHER	CHRISTOPHER K. LACK
PAUL R. BLANC	SCOTT W. LAW
KIRT R. BLATTENBERGER	DONG-SEON LEE
JAMES R. BOYD	LUKE W. MAHAN
RYAN M. CANNING	ARTHUR C. MCELVY
CHRISTOPHER CAVELLO	WAYNE E. MERKLEY
GREGORY H. CECIL	JEFFREY W. MIDDENDORF
JOHN W. COUNTZ	JAMES P. MORRIS
TIM W. DITTMER	KEVIN L. NICHT
ERICH G. EVERETT	CHRISTOPHER J. NIZIOL
ALAN K. GALAN	JOSEPH W. PLYMIRE
MICHAEL J. GARTER	CHARLES ALEXAND P. REEDER
RENNY R. GLAZER	DAVID REYNOLDS
JAMES M. HAUSE	PETER K. SUK
JASON C. HEIKENFELD	ERIK L. SWANBERG
KATHRINE P. HENSON-MACK	KEVIN L. THOMAS
ROBERT A. HUDGINS	MIKE VADNEY
JOHN A. JORDAN	JOYA VANDIVIER
KIMBERLY A. KEMP	SAIPRADEEP VENKATRAMAN
SCOTT L. KILLMEYER	MURALIMANO HAR VEPADHARMALINGAM
JOHN F. KLINE	PRADEEP K. WAYCHAL

We wish to extend our welcome to all of our Section's new members!!!

Architects of the Net of Nets - Part 5

by Dick Reiman, Historian

Vincent Cerf, working with Robert Kahn, had successfully demonstrated a triple-network Internet on November 22, 1977, with communications from a moving van via packet radio, into the ARPA's land lines, and through satellites to Norway, London, back across the Atlantic into the ARPA to a UCLA terminal. The only spectators were Cerf and a few engineers. The Internet birth was a humble one.

In 1978, Cerf was persuaded by Danny Cohen of ISI to simplify the stand for Transmission Control Protocol (TCP/IP) into two layers, TCP and IP: TCP for the ARPA, and TP (Internet Protocol) for the host computer, adjacent to the Interface Message Processor (IMP). TCP guaranteed the Arpanet a reliable sequenced data stream and catered better to diverse applications such as packet radio. IP then became a very simple protocol that was easy for gateway computers to implement. Implementation proliferated since the protocols were in the public domain, and were adopted by the popular Unix type of computer.

Around 1978, Kahn set up an informal advisory body, later to become the Internet Advisory Board, to document the many of the details of the Internet that only he and Cerf knew.

The ARPA/Internet benefited greatly from the government ties and support, since the government was not wedded to a single computer vendor. Also, the TCP/IP, funded by the government, was available to all that wanted it.

In the late 70's, Robert Kahn as program manager at ARPA, was able to advance the Internet by bestowing large scale contracts for research and development. One was to Stanford University for a "Very Large Scale Integrated Circuit" for \$1.5 million, and a second to University of California at Berkeley to refine Unix. These investments paid off in further consolidation of the Internet and the explosion of development of Local-area networks (LANs).

MCI Communications lured Cerf in 1982 to implement MCI Mail, the first e-mail service. Kahn took over Internet efforts, laying the groundwork for the Strategic Computing Program research effort, into multiprocessor machines, and large-scale databases.

Kahn left ARPA in 1985 to form a non-profit Corporation for National Research Initiatives (CNRI). CNRI focused on boosting the "information superhighway". Because of Kahn's credentials, The National Science Foundation, now the custodian to the Internet, awarded to his corporation the management of a gigabit networking program. With MCI Mail completed, Cerf became Kahn's first employee in 1986. CNRI built many early applications for the Internet including browsers, intelligent agents, and digital libraries.

Another big step was taken when Cerf petitioned the government to allow MCI Mail to connect to the Internet, a departure on research only connections. Cerf argued that commercial mail would benefit research by extending the links. Agreement was quickly drafted and signed due to Vincent Cerf's reputation, and that networking was small beans and nobody cared.

By June 1989, CNRI demonstrated MCI Mail connection and made it available for experimental use. Other online services quickly followed. CNRI set up the Internet Society for Internet standards. Cerf and Kahn, working together, had fathered the Internet.

20th Century Firsts
by Dick Reiman, Historian

- 1948 Scientists at Bell Labs invent the transistor to replace the vacuum tube.
- 1952 The first pocket-sized transistor radio is marketed by Sony in Japan.
- 1961 Texas Instruments patents the silicon chip.
- 1962 Lasers are first used for eye surgery; General Motors installs the first industrial robots; Canadian thinker Marshall McLahan predicts that electronic communications will make the world a global village.
- 1964 IBM introduces the first word processor.
- 1965 The Early Bird Communications Satellite enables the exchange of television programs between Europe and North America.
- 1970 IBM develops the floppy disk for storing computer data.
- 1971 Intel introduces the microprocessor; Texas Instruments markets the first pocket calculator, weighing some 2.5 pounds.
- 1973 Supermarkets install computer-coded labels.
- 1975 Liquid crystal displays are used for calculators and digital watches.
- 1977 The Apple II personal computer is launched; The first inexpensive auto-focus camera is marketed.
- 1978 Compact disks (CD's) are first demonstrated.
- 1979 Canada becomes the first country to operate a satellite TV broadcasting service; The mobile cellular telephone is launched; The Sony Walkman personal stereo is launched in Japan.
- 1980 The laser scanning process for reading bar codes is perfected by IBM.
- 1987 Solar-powered cars race across Australia from north to south.
- 1991 CD's now outsell tapes and phonograph records.

IEEE NEWS

NATIONAL ENGINEERS WEEK: "A UNIQUE OPPORTUNITY"

WASHINGTON, November 5, 1999 -- What better way to kick off the 21st Century than a week devoted to turning ideas into reality? National Engineers Week, February 20-26 2000, is a coordinated effort by major companies, engineering societies, schools, and students to focus on the role of engineering and its importance to our quality of life.

For the 2000 program, National Engineers Week offers free planning kit, with tips for sponsoring local activities and events, including an impressive National Engineers Week 2000 Poster. This includes a description of the National Engineers Week program, including Discover "E" - which will send tens of thousands of engineers into the nation's schools - and a media guide.

New this year, the National Academy of Engineering will name the greatest engineering achievements of the last century, based on a year-long survey of engineering societies.

For more information about National Engineers Week programs or for kits, see the National Engineers Week Web site at www.eweek.org.

IEEE, IEEE-USA ANNOUNCE FINAL ELECTION RESULTS

WASHINGTON, D.C., November 5, 1999 -- The results of the 1999 IEEE/IEEE-USA elections are in! Ned R. Sauthoff becomes the fourth IEEE-USA President directly elected by the IEEE's U.S. members, to follow 2000 President Merrill Buckley Jr. And James V. Leonard was voted IEEE-USA Member-at-Large, 2000-2001. In the IEEE election, Joel B. Snyder, a former IEEE-USA vice president of Professional Activities, was chosen IEEE President-Elect, 2000. Congratulations to our new officers and good luck!

The election results, as certified by the IEEE Tellers Committee on Nov. 4, are unofficial until the IEEE Board of Directors accepts the Report of the IEEE Tellers Committee at its Nov. 14 meeting.

The number of ballots mailed was 244,082. The number of valid ballots returned was 51,308. The rate of return was 21.02 percent. Other IEEE-wide results are:

OFFICE OF DIVISION DELEGATE/DIVISION DIRECTOR, 2000-2001

Division I Ralph W. Wyndrum, Jr.
Division III Thomas R. Rowbotham
Division VII B. Don Russell
Division IX Nahid Khazenie

OFFICE OF DIVISION DELEGATE-ELECT/DIRECTOR-ELECT, 2000

Division IV Peter W. Staecker
Division VIII Bruce D. Shriver

OFFICE OF REGION DELEGATE-ELECT/DIRECTOR-ELECT

Region 1, 2000-2001 Gerard A. Alphonse
Region 3, 2000-2001 James M. Howard
Region 5, 2000-2001 Jean M. Eason
Region 7, 2000-2001 Mohamed El-Hawary
Region 8, 2000 Levent Onural
Region 9, 2000-2001 Hugh Rudnick
Region 10, 2000 Teck-Seng Low

OFFICE OF STANDARDS ASSOCIATION

PRESIDENT, 2000 Donald C. Loughry
PRESIDENT-ELECT, 2000 Marco W. Migliaro

STANDARDS ASSN. BOARD OF GOVERNORS, MEMBERS-AT-LARGE, 2000-2001

John W. Pope Hans E. Weinrich
Gerald H. Peterson Louis Costrell

STANDARDS ASSN. BOARD OF GOVERNORS, MEMBERS-AT-LARGE, 2000

Ben C. Johnson Dennis Bodson
Ulrich Hartmann Stephen L. Diamond

OFFICE OF TECHNICAL ACTIVITIES VICE PRESIDENT-ELECT, 2000

Lewis M. Terman

For background information on the IEEE-USA elections and candidates, visit our nominations and elections Web page at <http://www.ieeeusa.org/election/index.html>

IEEE-USA ASSEMBLY ANNOUNCES ELECTION RESULTS

At the 10 November 1999 meeting of the IEEE-USA Assembly, the following officers were elected for 2000:

Vice President - Career Activities: John Steadman

Vice President - Member Activities: Robert Krause

Vice President - Professional Activities: Lee Stogner

Vice President - Technology Policy Activities: Mark Pullen

Secretary/Treasurer - Dale Caston

Vice President - Operations: no appointment made; oversight assigned to the 2000 IEEE-USA President-elect

IEEE Members Invited To Submit Papers To ICEECEE

PISCATAWAY, NJ, November 10, 1999 - The IEEE and United Engineering Fund (UEF) invite IEEE members to submit papers to an Interdisciplinary Conference on Electrical, Electronics, and Computer Engineering Education (ICEECEE) in the third Millennium. The conference will take place in Davos, Switzerland from 10-15 September 2000. Abstracts should be submitted electronically via the UEF Web site at www.engfnd.org no later than 31 Jan 2000.

The scope of the conference includes identification of both foreseeable and unforeseen challenges and problems that will impact future EE&C Engineering Education and proposal of agendas for finding solutions to these problems and challenges. By addressing all topics, ranging from technological to sociological through interdisciplinary means, this unique conference will assuredly impact future Engineering Education.

The conference theme will include topics related to the following subjects:

- Setting the expected needs for Engineer's knowledge in the future workplace by industry, information services, and governmental agency leaders.
- Define and propose future EE&C Education requirements
- Develop and propose curriculum for the third millennium
- Similarities and differences in EE Education between national educational systems

- Educational techniques, tools, and experiments
- Social implications of future Engineering Education
- Costs of future Engineering Education

Both oral and poster presentations are invited. Prospective authors of papers or poster presentations related to the topics of the conference and institutions interested in presenting results of activities in related fields are invited to submit an abstract. All accepted papers will be peer-reviewed for publication in the conference proceedings which will be distributed to all conference participants.

For more information, call Rosa at 212.591.7836.

THE 'NET IN THE NAUGHTIES: "PARALLELISM UNPARALLELED" TODAY'S ENGINEER LOOKS AT THE FUTURE OF THE INTERNET

WASHINGTON, November 15, 1999 -- The Fourth Quarter 1999 issue of TODAY's ENGINEER magazine includes Vinton G. Cerf's guest editorial "Engineering the Internet of the 2000s," predicting that explosive growth not only in users but in tools will mean "one billion devices" connected to the Internet by January 2003.

Other articles in the next issue of this award-winning magazine include: "The Internet's Next Generation"; "Dispatched to the Front Line"; "Making Connections"; "Just-in-Time Education"; "Home Work"; "Engineers Salaries Swell"; and "What's Your Meeting Agenda?"

Regular features include: "Professional Dilemmas: When Modifications Break the Law"; "Engineering Trends: Make Proper Balance of Work/Family a Priority"; and "Management Briefs: Generations Xers Mimic Traits of Hunter Gatherers".

According to Cerf's guest editorial, the Internet's exponential expansion presents "an enormous challenge to engineers responsible for developing and maintaining the infrastructure needed to sustain such growth." Cerf, one of the Internet's founders, notes: "Just as the personal comptuer transformed spreadsheets from a very expensive and laborious tool to a real-time tool for exploratory analysis, the proliferations of computers on the Internet offers opportunities for parallelism unparalleled in history (pun intended)." Examples include the Search for Extra-Terrestrial Intelligence - as a screen saver! -code-cracking, and electronic auctions.

Useful, well-written, and providing insights and examples not found elsewhere, TODAY'S ENGINEER is a vital source not only for engineers, but for anyone interested in how technology and personnel interact in today's workplace. For more information on TODAY'S ENGINEER, call 202-785-0017, ext. 313; e-mail ieee-magazine@ieee.org or visit the Web site at www.todaysengineer.org.

To subscribe at the low price of \$19.95, visit the Web site or call 800-678-4333 and ask for Product No. PB-331.

IEEE EDUCATIONAL ACTIVITIES BOARD PRESENTS 1999 AWARDS

This year the IEEE Educational Activities Board recognized six individuals and one company for their efforts in promoting education excellence for the engineering community. The "Meritorious Achievement Award in Accreditation Activities" went to Theodore Bickart, President of Colorado School of Mines and Richard Painter, founder of Painter Engineering, Inc. Both men were recognized for their sustained efforts to ensure that the accreditation process in both engineering and engineering technology will promote excellence in engineering education. Mohamed El-Hawary received the award for "Meritorious Achievement in Continuing Education." Dr. El-Hawary, currently Associate Dean of Engineering at Dalhousie University in Nova Scotia, has worked

tirelessly with the IEEE Power Engineering Society to promote the need for technical vitality through lifelong learning. Donna Brown, Associate Professor at the University of Illinois at Urbana-Champaign, was the recipient of the EAB "Major Educational Achievement Award". Dr. Brown is the director and co-developer of Mallard™, an asynchronous, interactive learning environment for the World Wide Web. The "Meritorious Service Citation" was presented to David Green, faculty member of the University of Alabama at Birmingham and Forrest Staffanson, recently retired following 46 years as a physicist and engineer with industry, academia

and government. This award is for "outstanding service in the aims and objectives of the Educational Activities Board." The "Employer Professional Development Award", established in 1995, went to Samsung Electronics Co., Ltd. This award recognizes companies that show outstanding commitment to employee development and continuing education. Seung-Jun Ahn, Managing Director, Strategic HR Team of Samsung Electronics was present to receive the award.

IEEE RELEASES VIDEO TUTORIAL ON OXIDE WEAROUT, BREAKDOWN, & RELIABILITY

PISCATAWAY, NJ, November 19, 1999 - Newly released from the IEEE is the video tutorial, Oxide Wearout, Breakdown, & Reliability. Carefully and concisely organized for the most effective utilization, this informative video covers the evolution, over the past thirty-five years, of concepts involved in oxide wearout, breakdown, and reliability.

Topics covered include:

- Brief history on oxide wearout
- Models for wearout and breakdown
- Characterization of wearout
- Physics, measurement, and consequences of trap generation
- Properties of the stress generated traps
- Coupling of trap generation to breakdown
- Differences between early electrical breakdowns
- Final thermal breakdown

The video includes an extensive compilation of references to literature significant within the field. Emphasis is placed on attempting to find the unifying physical and engineering principles that bind these different literary works together.

4 Hr. 30 Min.; List Price: \$775.00; Member Price: \$650.00. IEEE order #s: HV7053-QVE (NTSC version); HV7054-QVE (PAL version)

Order from the IEEE Customer Service Department, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331, USA; e-mail customer-service@ieee.org; phone: 1.800.678.4333; Web: <http://www.ieee.org/eab>

IEEE-USA BACKS ANNOUNCEMENT OF 'GREAT ENGINEERING ACHIEVEMENTS'

IEEE-USA volunteers and staff are working with the IEEE History Center and the National Academy of Engineers (NAE) to unveil the 20th century's great engineering achievements during National Engineers Week on Tuesday, Feb. 22, 2000, at the National Press Club in Washington. The top 20 achievements will be announced based on the recommendations of a distinguished NAE panel culling through more than 100 nominations from 60-plus engineering groups, including the IEEE.

At its October meeting, the IEEE History Committee compiled the following 11 nominations, based on members' submissions and sent to the NAE last month. These include, ranked from the top:

- large-scale electric power systems
- global telephone systems
- computers and software
- personal and broadcast telecommunications systems (including tv, radio, cellular and microwave)
- electron devices (including vacuum tubes, transistors, integrated circuits, and optical and laser devices)
- computer networks (including the Internet and the World Wide Web)
- medical electronic systems for diagnosis, imaging and therapy
- electric household appliances
- the modern air-traffic control system (including telemetric, radar, avionic and global positioning systems)
- feedback control systems (including robotics)
- signal processing (including image processing)

In August, IEEE members were solicited for their nominations through an INSTITUTE column by Michael N. Geselowitz, director of the History Center. According to Dr. Geselowitz, many members responded as individuals; and some recommendations were provided by the technical societies, through polling their membership or AdComs.

Following the announcement during National Engineers Week next February, the top 20 achievements will appear on the IEEE Home Page, in IEEE-USA THIS WEEK, and in THE INSTITUTE.

***TODAY'S ENGINEER* POLL ASKS: 'SHOULD ENGINEERS BARGAIN COLLECTIVELY?'**

In the fourth-quarter issue of TODAY'S ENGINEER, IEEE-USA's quarterly magazine with tips, strategies and solutions for fast-track technical professionals, readers are asked to respond to the poll question: "Should engineers bargain collectively?" According to TODAY'S ENGINEER, "In reaction to the changing face of the American economy and the nation's increasingly intricate laws regulating industries, some high-profile trade associations are entertaining thoughts of unionizing to bargain collectively on behalf of their members. Such a move, by a group such as the AMA or the ABA, would challenge the traditional definition of professionalism -- skills coupled with knowledge, as well as the customary role of the union."

IEEE-USA TODAY e-zine subscribers can also participate in this poll at
http://www.ieeeusathisweek.org/forum_collective_bargain/index.htm

To obtain a free copy of the fourth-quarter issue of TODAY'S ENGINEER, send an e-mail to p.mccarter@ieee.org. To see the third-quarter issue as well as to subscribe to the quarterly, go to <http://www.todaysengineer.org/>

'ESSENTIAL IDEAS FOR CAREER DEVELOPMENT' OFFERED IN *THE BALANCED ENGINEER*

Make sure your engineering career is prepared for the 21st century with THE BALANCED ENGINEER: ENTERING THE NEW MILLENNIUM, a collection of essential ideas for career development chosen from the best papers presented at the IEEE-USA's 1999 Professional Development Conference in Dallas. The 247-page book covers three major areas: career development, skills development and management knowledge. The compendium, product no. UH2986, is available at a reduced rate of \$25 to IEEE members. An overview of the papers can be seen and the compendium ordered at <http://www.ieeeusa.org/catalog/balanced99.html>. Orders can

also be placed by calling 1-800-678-4333; sending a fax to 1-732-981-9667; dispatching an e-mail to customer-service@ieee.org; or going to www.ieee.org/warehouse.

IEEE UNVEILS NEW VIDEO-ON-DEMAND SERVICE WITH FREE ACCESS UNTIL FEBRUARY 2000

PISCATAWAY, NJ, December 1, 1999 - The IEEE has launched a new educational service that brings technical courses to the users' desktops. IEEE Video-On-Demand, available from the IEEE Web site at <http://ieee.mediaplatform.com>, streams entire video tutorials directly to viewers when they want them. The IEEE is offering a free trial period for any course from December 1, 1999 through January 31, 2000.

Segments of each video are available for preview before subscribing to the service. After registration, viewers will be able to watch the complete tutorials, with full motion video and audio, PowerPoint slides, presentation notes and an interactive table of contents that allows users to go directly to information or presentations of interest.

IEEE education video tutorials take an in-depth look at critical technologies in the electrical engineering fields. Available through the IEEE Video-On-Demand service will be tutorials on computer engineering, communications, reliability, power, signal processing, and more. Among the titles are:

- Real-Time Systems: An Engineer's Guided Tour
- Strategies and Planning for a Wireless Technology System
- Developing Software For Safety Critical Systems
- P.E. Review: Transmission and Distribution & Machinery and Applications
- Power Electronics and Motor Drives
- Video Signal Processors

IEEE Video-on-Demand uses SoftCom technology in conjunction with RealNetworks™ G2 Player, so that anyone with a computer and high-speed modem can access the growing list of IEEE video tutorials. SoftCom's Java-based, patent-pending technology makes Internet video an immersive, interactive viewing experience. Their streaming video technology allows for video to be delivered from one point to another without a download period. Browsers with faster network connections will receive better quality video.

To experience this leading-edge technology during the free access period, log on to <http://ieee.mediaplatform.com>. To speak with a representative from IEEE about Video-On-Demand, contact Alan Trembly, Business Development Manager, at a.trembly@ieee.org or 732.562.5488.

IEEE-USA INSTALLS NEW PHONE SYSTEM

IEEE-USA has installed a new Nortel Networks phone system. All IEEE-USA staff have been assigned new extensions, but our main number remains the same: (202)785-0017. During regular business hours, our receptionist will be able to connect you directly to your party or your party's voice mail. We are currently working to establish an automated directory for use during non-business hours. As soon as staff extensions are finalized, we will forward that information on to you. Please bear with us during this transition period as we continue to resolve existing glitches.

The IEEE Cincinnati Section Executive Committee
Member Names and Phone Numbers

Cincinnati Section Voice Mail (call for meeting reservations)	629-9380
Section Web Page	Http://ieee.cincinnati.fuse.net/
Ron Harbaugh - Chairman	352-2941, Ron.Harbaugh@CinPD.RCC.ORG (E-mail)
Jim Everly - Vice Chairman; PACE	556-4241, James.Everly@UC.Edu (E-mail)
Orest Melnyk - Treasurer	397-5419, o.melnyk@ieee.org (E-mail)
Laurie Tappel - Secretary	397-6383, ltappel@cinbell.com (E-mail)
Steve Olenick - Member-At-Large	860-3456, Ext. 138, steveo@nova-eng.com (E-mail)
Mark Strong - Member-At-Large	397-0304, m.strong@ieee.org (E-mail)
Jack Beckmeyer - Arrangements Chairman	353-3834, beckmeyer@fuse.net (E-mail)
Randy Holt - Membership	572-5710 (Office), HOLTHR@NKU.EDU (E-mail)
Bob Morrison - Editor	287-3697 (Office), 287-4155 (Fax), j.r.morrison@ieee.org (E-mail)

JANUARY 2000

IEEE CINCINNATI SECTION NEWSLETTER



Cinergy Corporation
PO Box 960, Room 516A
Cincinnati, OH 45201
Attn: J. R. Morrison

DATED MATERIAL
Please deliver promptly
If undeliverable, please discard